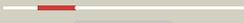
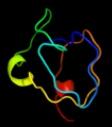
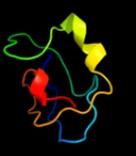
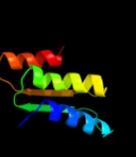


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P42604
Date	Thu Jan 5 12:01:48 GMT 2012
Unique Job ID	4ad8af1865813e3b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3k3sG_	 Alignment		100.0	98	PDB header: hydrolase Chain: G; PDB Molecule: altronate hydrolase; PDBTitle: crystal structure of altronate hydrolase (fragment 1-84) from shigella2 flexneri.
2	c3lazB_	 Alignment		99.9	33	PDB header: lyase Chain: B; PDB Molecule: d-galactarate dehydratase; PDBTitle: the crystal structure of the n-terminal domain of d-2 galactarate dehydratase from escherichia coli cft073
3	c3frnA_	 Alignment		89.8	16	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: flagellar protein flga; PDBTitle: crystal structure of flagellar protein flga from thermotoga maritima2 msb8
4	d1vmea1	 Alignment		88.1	11	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
5	c1qd1A_	 Alignment		82.1	17	PDB header: transferase Chain: A; PDB Molecule: formiminotransferase-cyclodeaminase; PDBTitle: the crystal structure of the formiminotransferase domain of2 formiminotransferase-cyclodeaminase.
6	c3ff1B_	 Alignment		79.9	15	PDB header: isomerase Chain: B; PDB Molecule: glucose-6-phosphate isomerase; PDBTitle: structure of glucose 6-phosphate isomerase from staphylococcus aureus
7	d2zdra1	 Alignment		77.5	27	Fold: beta-clip Superfamily: AFP III-like domain Family: AFP III-like domain
8	c3hr4C_	 Alignment		75.4	15	PDB header: oxidoreductase/metal binding protein Chain: C; PDB Molecule: nitric oxide synthase, inducible; PDBTitle: human inos reductase and calmodulin complex
9	d1c7qa_	 Alignment		74.9	13	Fold: SIS domain Superfamily: SIS domain Family: Phosphoglucose isomerase, PGI
10	d1vlia1	 Alignment		74.2	25	Fold: beta-clip Superfamily: AFP III-like domain Family: AFP III-like domain
11	c3g8rA_	 Alignment		69.6	25	PDB header: biosynthetic protein Chain: A; PDB Molecule: probable spore coat polysaccharide biosynthesis protein e; PDBTitle: crystal structure of putative spore coat polysaccharide biosynthesis2 protein e from chromobacterium violaceum atcc 12472

12	c3m7oB_	Alignment		67.2	21	PDB header: immune system Chain: B: PDB Molecule: lymphocyte antigen 86; PDBTitle: crystal structure of mouse md-1 in complex with phosphatidylcholine
13	c1tt9B_	Alignment		66.7	19	PDB header: transferase, lyase Chain: B: PDB Molecule: formimidoyltransferase-cyclodeaminase PDBTitle: structure of the bifunctional and golgi associated2 formiminotransferase cyclodeaminase octamer
14	c1xuzA_	Alignment		63.6	29	PDB header: biosynthetic protein Chain: A: PDB Molecule: polysialic acid capsule biosynthesis protein siac; PDBTitle: crystal structure analysis of sialic acid synthase (neub)from2 neisseria meningitidis, bound to mn2+, phosphoenolpyruvate, and n-3 acetyl mannosaminitol
15	c2hnbA_	Alignment		60.8	18	PDB header: electron transport Chain: A: PDB Molecule: protein mioc; PDBTitle: solution structure of a bacterial holo-flavodoxin
16	d1b1ca_	Alignment		57.7	15	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Cytochrome p450 reductase N-terminal domain-like
17	c1vliA_	Alignment		55.7	26	PDB header: biosynthetic protein Chain: A: PDB Molecule: spore coat polysaccharide biosynthesis protein spse; PDBTitle: crystal structure of spore coat polysaccharide biosynthesis protein2 spse (bsu37870) from bacillus subtilis at 2.38 a resolution
18	d2nu7b1	Alignment		53.4	13	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
19	c2q9uB_	Alignment		46.9	10	PDB header: oxidoreductase Chain: B: PDB Molecule: a-type flavoprotein; PDBTitle: crystal structure of the flavodii iron protein from giardia2 intestinalis
20	d1eucb1	Alignment		46.6	12	Fold: Flavodoxin-like Superfamily: Succinyl-CoA synthetase domains Family: Succinyl-CoA synthetase domains
21	d1ja1a2	Alignment	not modelled	45.7	16	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Cytochrome p450 reductase N-terminal domain-like
22	c3b8hA_	Alignment	not modelled	41.8	26	PDB header: biosynthetic protein/transferase Chain: A: PDB Molecule: elongation factor 2; PDBTitle: structure of the eef2-exoa(e546a)-nad+ complex
23	c2ohiB_	Alignment	not modelled	41.4	13	PDB header: oxidoreductase Chain: B: PDB Molecule: type a flavoprotein fpra; PDBTitle: crystal structure of coenzyme f420h2 oxidase (fpra), a diiron2 flavoprotein, reduced state
24	d2f69a2	Alignment	not modelled	41.2	18	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
25	c3hjbA_	Alignment	not modelled	40.1	18	PDB header: isomerase Chain: A: PDB Molecule: glucose-6-phosphate isomerase; PDBTitle: 1.5 angstrom crystal structure of glucose-6-phosphate isomerase from2 vibrio cholerae.
26	c1ychD_	Alignment	not modelled	40.0	13	PDB header: oxidoreductase Chain: D: PDB Molecule: nitric oxide reductase; PDBTitle: x-ray crystal structures of moorella thermoacetica fpra.2 novel diiron site structure and mechanistic insights into3 a scavenging nitric oxide reductase
27	c3tr5C_	Alignment	not modelled	38.9	26	PDB header: translation Chain: C: PDB Molecule: peptide chain release factor 3; PDBTitle: structure of a peptide chain release factor 3 (prfc) from coxiella2 burnetii
28	c2z64C_	Alignment	not modelled	35.0	14	PDB header: immune system Chain: C: PDB Molecule: lymphocyte antigen 96; PDBTitle: crystal structure of mouse tlr4 and mouse md-2 complex

29	c3cnlA_	Alignment	not modelled	34.5	24	PDB header: signaling protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of gnp-bound ylqf from t. maritima
30	c1vmeB_	Alignment	not modelled	34.3	13	PDB header: electron transport Chain: B: PDB Molecule: flavoprotein; PDBTitle: crystal structure of flavoprotein (tm0755) from thermotoga maritima at 2.1.80 a resolution
31	c3nbuC_	Alignment	not modelled	34.3	17	PDB header: isomerase Chain: C: PDB Molecule: glucose-6-phosphate isomerase; PDBTitle: crystal structure of pgi glucosephosphate isomerase
32	c2elfA_	Alignment	not modelled	34.0	15	PDB header: translation Chain: A: PDB Molecule: protein translation elongation factor 1a; PDBTitle: crystal structure of the selb-like elongation factor efpyl2 from methanosarcina mazei
33	c3cdzA_	Alignment	not modelled	33.4	24	PDB header: blood clotting Chain: A: PDB Molecule: coagulation factor viii heavy chain; PDBTitle: crystal structure of human factor viii
34	c2j69D_	Alignment	not modelled	33.1	26	PDB header: hydrolase Chain: D: PDB Molecule: bacterial dynamin-like protein; PDBTitle: bacterial dynamin-like protein bdlp
35	d1puja_	Alignment	not modelled	33.0	36	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: G proteins
36	d1ycga1	Alignment	not modelled	32.7	10	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
37	c3izq1_	Alignment	not modelled	32.5	21	PDB header: ribosomal protein,hydrolase Chain: 1: PDB Molecule: elongation factor 1 alpha-like protein; PDBTitle: structure of the dom34-hbs1-gdnp complex bound to a translating2 ribosome
38	d1e5da1	Alignment	not modelled	31.1	10	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
39	c1g7tA_	Alignment	not modelled	29.4	22	PDB header: translation Chain: A: PDB Molecule: translation initiation factor if2/eif5b; PDBTitle: x-ray structure of translation initiation factor if2/eif5b2 complexed with gdnp
40	c2q8nB_	Alignment	not modelled	27.4	19	PDB header: isomerase Chain: B: PDB Molecule: glucose-6-phosphate isomerase; PDBTitle: crystal structure of glucose-6-phosphate isomerase (ec2.5.3.1.9) (tm1385) from thermotoga maritima at 1.82 a3 resolution
41	d1ag9a_	Alignment	not modelled	27.2	16	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
42	c3degC_	Alignment	not modelled	26.5	24	PDB header: ribosome Chain: C: PDB Molecule: gtp-binding protein lepa; PDBTitle: complex of elongating escherichia coli 70s ribosome and ef4(lepa)-2 gmppnp
43	d1ykga1	Alignment	not modelled	25.7	15	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Cytochrome p450 reductase N-terminal domain-like
44	c3ka5A_	Alignment	not modelled	25.1	40	PDB header: chaperone Chain: A: PDB Molecule: ribosome-associated protein y (psrp-1); PDBTitle: crystal structure of ribosome-associated protein y (psrp-1)2 from clostridium acetobutylicum. northeast structural3 genomics consortium target id car123a
45	c2cmgA_	Alignment	not modelled	24.7	9	PDB header: transferase Chain: A: PDB Molecule: spermidine synthase; PDBTitle: crystal structure of spermidine synthase from helicobacter2 pylori
46	c1t10A_	Alignment	not modelled	24.5	13	PDB header: isomerase Chain: A: PDB Molecule: glucose-6-phosphate isomerase; PDBTitle: phosphoglucose isomerase from leishmania mexicana in complex with2 substrate d-fructose-6-phosphate
47	c3k2tA_	Alignment	not modelled	24.4	40	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: lmo2511 protein; PDBTitle: crystal structure of lmo2511 protein from listeria2 monocytogenes, northeast structural genomics consortium3 target lkr84a
48	d1h3ia2	Alignment	not modelled	22.8	8	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
49	c3f9xA_	Alignment	not modelled	22.8	38	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase setd8; PDBTitle: structural insights into lysine multiple methylation by set2 domain methyltransferases, set8-y334f / h4-lys20me2 /3 adohcy
50	c2ywfA_	Alignment	not modelled	22.6	28	PDB header: translation Chain: A: PDB Molecule: gtp-binding protein lepa; PDBTitle: crystal structure of gmppnp-bound lepa from aquifex aeolicus
51	c3h6lA_	Alignment	not modelled	22.5	15	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase setd2; PDBTitle: methyltransferase domain of human set domain-containing protein 2
52	d1o0ya_	Alignment	not modelled	22.0	15	Fold: TIM beta/alpha-barrel Superfamily: Al dolase Family: Class I aldolase
53	d2fcra_	Alignment	not modelled	21.9	13	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
54	d1oboa_	Alignment	not modelled	21.7	15	Fold: Flavodoxin-like Superfamily: Flavoproteins

						Family: Flavodoxin-related
55	c3opeA	Alignment	not modelled	20.9	31	PDB header: transferase Chain: A: PDB Molecule: probable histone-lysine n-methyltransferase ash11; PDBTitle: structural basis of auto-inhibitory mechanism of histone2 methyltransferase
56	d1bvfy	Alignment	not modelled	20.6	18	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
57	c1bvfyF	Alignment	not modelled	20.6	18	PDB header: oxidoreductase Chain: F: PDB Molecule: protein (cytochrome p450 bm-3); PDBTitle: complex of the heme and fnm-binding domains of the2 cytochrome p450(bm-3)
58	c1zo1l	Alignment	not modelled	20.5	15	PDB header: translation/rna Chain: I: PDB Molecule: translation initiation factor 2; PDBTitle: if2, if1, and trna fitted to cryo-em data of e. coli 70s2 initiation complex
59	c1x5bA	Alignment	not modelled	20.3	17	PDB header: protein binding Chain: A: PDB Molecule: signal transducing adaptor molecule 2; PDBTitle: the solution structure of the vhs domain of human signal2 transducing adaptor molecule 2
60	c2bm0A	Alignment	not modelled	20.1	21	PDB header: elongation factor Chain: A: PDB Molecule: elongation factor g; PDBTitle: ribosomal elongation factor g (ef-g) fusidic acid resistant2 mutant t84a
61	c2o2cB	Alignment	not modelled	20.0	16	PDB header: isomerase Chain: B: PDB Molecule: glucose-6-phosphate isomerase, glycosomal; PDBTitle: crystal structure of phosphoglucose isomerase from t. brucei2 containing glucose-6-phosphate in the active site
62	d2nqra2	Alignment	not modelled	20.0	20	Fold: MoeA N-terminal region -like Superfamily: MoeA N-terminal region -like Family: MoeA N-terminal region -like
63	d1c8ba	Alignment	not modelled	19.8	20	Fold: Phosphorylase/hydrolase-like Superfamily: HybD-like Family: Germination protease
64	c3mu3A	Alignment	not modelled	19.3	14	PDB header: immune system Chain: A: PDB Molecule: protein md-1; PDBTitle: crystal structure of chicken md-1 complexed with lipid iva
65	d1ml9a	Alignment	not modelled	19.3	46	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
66	c2wu8A	Alignment	not modelled	19.1	15	PDB header: isomerase Chain: A: PDB Molecule: glucose-6-phosphate isomerase; PDBTitle: structural studies of phosphoglucose isomerase from2 mycobacterium tuberculosis h37rv
67	c3o3nB	Alignment	not modelled	19.0	17	PDB header: lyase Chain: B: PDB Molecule: beta-subunit 2-hydroxyacyl-coa dehydratase; PDBTitle: (r)-2-hydroxyisocaproyl-coa dehydratase in complex with its substrate2 (r)-2-hydroxyisocaproyl-coa
68	d1iata	Alignment	not modelled	18.9	18	Fold: SIS domain Superfamily: SIS domain Family: Phosphoglucose isomerase, PGI
69	c1s0uA	Alignment	not modelled	18.9	18	PDB header: translation Chain: A: PDB Molecule: translation initiation factor 2 gamma subunit; PDBTitle: eif2gamma apo
70	d1pkla3	Alignment	not modelled	18.5	22	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
71	c2qv5A	Alignment	not modelled	17.6	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu2773; PDBTitle: crystal structure of uncharacterized protein atu2773 from2 agrobacterium tumefaciens c58
72	c3hlyA	Alignment	not modelled	17.5	14	PDB header: flavoprotein Chain: A: PDB Molecule: flavodoxin-like domain; PDBTitle: crystal structure of the flavodoxin-like domain from2 synechococcus sp q5mzp6_synp6 protein. northeast structural3 genomics consortium target snr135d.
73	d1wu2a2	Alignment	not modelled	17.2	27	Fold: MoeA N-terminal region -like Superfamily: MoeA N-terminal region -like Family: MoeA N-terminal region -like
74	d1mvha	Alignment	not modelled	17.1	31	Fold: beta-clip Superfamily: SET domain Family: Histone lysine methyltransferases
75	c1mvhA	Alignment	not modelled	17.1	31	PDB header: transferase Chain: A: PDB Molecule: cryptic loci regulator 4; PDBTitle: structure of the set domain histone lysine2 methyltransferase clr4
76	d1q50a	Alignment	not modelled	16.8	13	Fold: SIS domain Superfamily: SIS domain Family: Phosphoglucose isomerase, PGI
77	d1nuia2	Alignment	not modelled	16.4	67	Fold: Rubredoxin-like Superfamily: Zinc beta-ribbon Family: DNA primase zinc finger
78	c2xexA	Alignment	not modelled	16.3	16	PDB header: translation Chain: A: PDB Molecule: elongation factor g; PDBTitle: crystal structure of staphylococcus aureus elongation factor2 g
79	d2f23a2	Alignment	not modelled	16.1	23	Fold: FKBP-like Superfamily: FKBP-like Family: GreA transcript cleavage factor, C-terminal domain
						Fold: alpha-alpha superhelix

80	d1dypa1	Alignment	not modelled	15.6	17	Superfamily: ENTH/VHS domain Family: VHS domain
81	d1to6a_	Alignment	not modelled	15.4	18	Fold: Glycerate kinase I Superfamily: Glycerate kinase I Family: Glycerate kinase I
82	c3lpmA_	Alignment	not modelled	15.3	18	PDB header: transferase Chain: A: PDB Molecule: putative methyltransferase; PDBTitle: crystal structure of putative methyltransferase small domain protein2 from listeria monocytogenes
83	c2r3aA_	Alignment	not modelled	15.3	23	PDB header: transferase Chain: A: PDB Molecule: histone-lysine n-methyltransferase suv39h2; PDBTitle: methyltransferase domain of human suppressor of variegation2 3-9 homolog 2
84	c3oa3A_	Alignment	not modelled	15.1	10	PDB header: lyase Chain: A: PDB Molecule: aldolase; PDBTitle: crystal structure of a putative deoxyribose-phosphate aldolase from2 coccidioides immitis
85	c3o3nA_	Alignment	not modelled	15.1	9	PDB header: lyase Chain: A: PDB Molecule: alpha-subunit 2-hydroxyisocaproyl-coa dehydratase; PDBTitle: (r)-2-hydroxyisocaproyl-coa dehydratase in complex with its substrate2 (r)-2-hydroxyisocaproyl-coa
86	d1txna_	Alignment	not modelled	14.5	21	Fold: Coproporphyrinogen III oxidase Superfamily: Coproporphyrinogen III oxidase Family: Coproporphyrinogen III oxidase
87	d1u0fa_	Alignment	not modelled	14.1	17	Fold: SIS domain Superfamily: SIS domain Family: Phosphoglucose isomerase, PGI
88	c1lnsA_	Alignment	not modelled	14.1	10	PDB header: hydrolase Chain: A: PDB Molecule: x-prolyl dipeptidyl aminopeptidase; PDBTitle: crystal structure analysis of the x-prolyl dipeptidyl2 aminopeptidase from lactococcus lactis
89	c2e59A_	Alignment	not modelled	14.0	18	PDB header: lipid binding protein Chain: A: PDB Molecule: Lymphocyte antigen 96; PDBTitle: crystal structure of human md-2 in complex with lipid iva
90	c3by5A_	Alignment	not modelled	14.0	27	PDB header: biosynthetic protein Chain: A: PDB Molecule: cobalamin biosynthesis protein; PDBTitle: crystal structure of cobalamin biosynthesis protein chig from2 agrobacterium tumefaciens str. c58
91	d3by5a1	Alignment	not modelled	14.0	27	Fold: CobE/GbiG C-terminal domain-like Superfamily: CobE/GbiG C-terminal domain-like Family: CobE/GbiG C-terminal domain-like
92	c2ftcB_	Alignment	not modelled	14.0	14	PDB header: ribosome Chain: B: PDB Molecule: mitochondrial ribosomal protein l2; PDBTitle: structural model for the large subunit of the mammalian mitochondrial2 ribosome
93	c1skqB_	Alignment	not modelled	13.9	24	PDB header: translation Chain: B: PDB Molecule: elongation factor 1-alpha; PDBTitle: the crystal structure of sulfolobus solfataricus elongation2 factor 1-alpha in complex with magnesium and gdp
94	d2g50a3	Alignment	not modelled	13.7	13	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
95	d1lnsa2	Alignment	not modelled	13.5	10	Fold: Galactose-binding domain-like Superfamily: Galactose-binding domain-like Family: PepX C-terminal domain-like
96	d2evra2	Alignment	not modelled	13.4	8	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: NlpC/P60
97	c2qptA_	Alignment	not modelled	13.3	24	PDB header: endocytosis Chain: A: PDB Molecule: eh domain-containing protein-2; PDBTitle: crystal structure of an ehd atpase involved in membrane remodelling
98	c3simA_	Alignment	not modelled	13.0	18	PDB header: hydrolase Chain: A: PDB Molecule: protein, family 18 chitinase; PDBTitle: crystallographic structure analysis of family 18 chitinase from crocus2 vernus
99	c2d6fA_	Alignment	not modelled	13.0	21	PDB header: ligase/rna Chain: A: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit d; PDBTitle: crystal structure of glu-trna(gln) amidotransferase in the2 complex with trna(gln)